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10/807,060	03/23/2004	Jonathan Maron	100202433-2	4057

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HEWLETT PACKARD COMPANY  
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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
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JOHNSON, JOHNESE T

ART UNIT	PAPER NUMBER
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2166

NOTIFICATION DATE	DELIVERY MODE
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12/16/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/807,060	<b>Applicant(s)</b> MARON, JONATHAN	
	<b>Examiner</b> Johnese Johnson	<b>Art Unit</b> 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Remarks*

1. In response to the Amendment filed on September 10, 2008, claims 1-20 are pending in this application.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson et al. (2002//0188538) in view of Pace et al. (US. PG. Pub. No. 2003/0050932).

As to claim 1, Robertson et al. disclose:

A method to provide a service in a controlled run-time environment,  
comprising:

registering a proxy service in said controlled run-time environment wherein said proxy service implements an interface defined according to said controlled run-time environment (see paragraph [0153]) configured to services operating in said controlled run-time environment to interoperate with said proxy service (see

paragraph [0193]);

receiving service information by said proxy service from a local service executing in said controlled run-time environment via an interface method of said proxy service (see paragraph [0253]);

determining by said proxy service whether the received service information is valid for a remote service requested to be invoked by said proxy service, wherein an exception is returned to said local service from said proxy service without communication of invalid service information to said remote service when a determination of invalid service information is made by said proxy service (see paragraph [0286]);

However, Robertson et al. does not explicitly disclose:

communicating said service information to a remote service from said proxy service when a determination of valid service information is made by said proxy service; receiving processed information from said remote service in response to said communicating; and returning said processed information to said local service from said proxy service.

Pace et al. disclose:

communicating said service information to a remote service from said proxy service when a determination of valid service information is made by said proxy service (see paragraph [0908], lines 1-9); receiving processed information from said remote service in response to said communicating (see paragraph [0908], lines 4-9); and

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returning said processed information to said local service from said proxy service (see paragraph [0908], lines 4-9).

It would have been obvious to have modified the teachings of Robertson et al. by the teachings of Pace et al. to fulfill an object request because previous methods were too slow and costly (see Pace et al. paragraphs [0907] – [0908]).

As to claims 2 and 18, Robertson et al., as modified, disclose:

wherein said proxy service is an object of a class that is instantiated by said controlled run-time environment (see Pace et al. paragraph [0053]).

As to claims 3 and 13, Robertson et al., as modified, disclose:

wherein said controlled run-time environment means instantiates said object in a partition (see Pace et al. paragraph [0908], lines 4-9) and only permits services operating in said partition to access said proxy service (see Pace et al. paragraph [0440]; wherein EJBs extend the attributes of Java thereby delivering access security).

As to claim 4, Robertson et al., as modified, disclose:

wherein said communicating service information comprises:

encapsulating said service information in an extensible mark-up language (XML) file (see Pace et al. [0317]; wherein information can be in the form of a java servlet and JSP and the JSP is in xml).

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As to claims 5 and 14, Robertson et al., as modified, disclose:

security management means for exposing said proxy service only when said security management means determines access is permitted according to security parameters (see Pace et al. paragraph [0398]; wherein EJBs extend the attributes of Java thereby delivering access security).

As to claim 6, Robertson et al., as modified, disclose:

wherein said exposing comprises: determining user-level authorization from said security parameters (see Pace et al. paragraph [0322], lines 22-27; wherein the EJB container manages access of multiple users).

As to claim 7 Robertson et al., as modified, disclose:

wherein said exposing comprises: determining process-level authorization from said security parameters (see Pace et al. paragraph [0067]; wherein the container manages control of transactions).

As to claims 8 and 15, Robertson et al., as modified, disclose:

further comprising: creating a log of access to said remote service (see Pace et al. paragraph [0750]).

As to claims 9 and 16, Pace Robertson et al., as modified, disclose:

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wherein said communicating said service information comprises: performing a remote procedure call (see Pace et al. paragraph [0477] – performs RMI) .

As to claim 10, Robertson et al. disclose:

A system to provide a modular software service, comprising:

controlled run-time environment means for managing processes (see paragraph [0193]);

service registry means for registering services operating in said controlled run-time environment means, wherein at least one registered service is a proxy service means (see paragraph [153]);

said proxy service means implementing an interface defined according to said controlled run-time environment means for enabling services operating in said controlled run-time environment means to interoperate with said proxy service means, said proxy service means comprising:

means for receiving service information by said proxy service means from a local service executing in said controlled run-time environment means (see paragraph [253]);

means for determining by said proxy service whether the received service information is valid for a remote service requested to be invoked by said proxy service, wherein an exception is returned to said local service from said proxy service without communication of invalid service information to said remote service when a determination of invalid service information is made by said proxy service (see

paragraph [0286]);

However, Robertson et al. does not explicitly disclose:

means for communicating said service information to a remote service from said proxy service when a determination of valid service information is made by said proxy service means;

means for receiving processed information from said remote service in response to said communicated service information; and

means for returning said processed information to said local.

Pace et al. disclose:

means for communicating said service information to a remote service from said proxy service when a determination of valid service information is made by said proxy service means (see paragraph [0908], lines 1-9);

means for receiving processed information from said remote service in response to said communicated service information (see paragraph [0908], lines 4-9); and

means for returning said processed information to said local service (see paragraph [0908], lines 4-9).

It would have been obvious to have modified the teachings of Robertson et al. by the teachings of Pace et al. to fulfill an object request because previous methods were too slow and costly (see Pace et al. paragraphs [0907] – [0908]).

As to claims 11 and 19, Robertson et al., as modified, disclose:



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wherein said proxy service means further comprises:

means for verifying said service information that is operable before said means for communicating (see paragraph [0121], lines 6-11, and paragraph [0190], lines 1-5).

As to claims 12 and 20, Robertson et al., as modified, disclose:

wherein said proxy service means further comprises:

means for communicating with a distributed service registry to identify said remote service (see paragraph [0477]).

As to claim 17, Robertson et al. disclose:

A computer-readable medium that comprises executable instructions for providing a service in a controlled run-time environment, said executable instructions comprising (see paragraph [0113]) - software):

code for registering (see paragraph [0113]) a proxy service in said controlled run-time

environment wherein said proxy service implements an interface defined

according to said controlled run-time environment to enable services operating in

said controlled run-time environment (see paragraph [0153]) configured to

services operating in said controlled run-time environment to interoperate with

said proxy service (see paragraph [0193]);

coded for receiving (see paragraph [0113]) service information by said proxy service

from a local service executing in said controlled run-time environment via an

interface method of said proxy service (see paragraph [0253]);

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code for determining by said proxy service whether the received service information is valid for a remote service requested to be invoked by said proxy service, wherein an exception is returned to said local service from said proxy service without communication of invalid service information to said remote service when a determination of invalid service information is made by said proxy service (see paragraph [0286]);

However, Robertson et al. does not explicitly disclose:

code for communicating said service information to a remote service from said proxy service;

code for receiving processed information from said remote service in response to said communicating; and

code for returning said processed information to said local service from said proxy service.

Pace et al. disclose:

code for communicating said service information to a remote service from said proxy service when a determination of valid service information is made by said proxy service means (see paragraph [0908], lines 1-9);

code for receiving processed information from said remote service in response to said communicating (see paragraph [0908], lines 4-9); and

code for returning said processed information to said local service from said proxy service (see paragraph [0908], lines 4-9).

It would have been obvious to have modified the teachings of Robertson et al.

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by the teachings of Pace et al. to fulfill an object request because previous methods were too slow and costly (see Pace et al. paragraphs [0907] – [0908]).

### ***Response to Arguments***

4. Applicant's arguments filed 9-10-2008 have been fully considered but they are not persuasive.

Applicant's arguments that neither Robertson nor Pace disclose, “determining by said proxy service whether the received service information is valid for a remote service requested to be invoked by said proxy service, wherein an exception is returned to said local service from said proxy service without communication of invalid service information to said remote service when a determination of invalid service information is made by said proxy service ” or “communicating said service information to said remote service from said proxy service when a determination of valid service information is made by said proxy service” is acknowledged but is not deemed persuasive.

Based on the examiner's interpretation, Robertson discloses "determining by said proxy service whether the received service information is valid for a remote service requested to be invoked by said proxy service, wherein an exception is returned to said local service from said proxy service without communication of invalid service information to said remote service when a determination of invalid service information is made by said proxy service" with "FIG. 15B is a flowchart depicting a process using smart proxy for the self-healing of stale references in accordance with the present

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invention. This process is performed entirely by the service's smart proxy that was passed to a client during lookup, thus the process is actually performed internal to the client (unbeknownst to the client). The process begins with smart proxy 1420 performing an iterative check to determine if requests to a service, service 1406 for instance, result in a stale exception (step 1522). If not, the check continues to iterate through. If a stale exception is returned, then smart proxy 1420 attempts to relocate service 1460 in its new container (step 1524). Smart proxy 1420 looks up service 14056 in registrar 1410 for an updated URL to service 1406's location. However, merely because the service is not responding to requests from client 1408 does not necessarily mean that service 1406 has been restarted elsewhere in another VM container. If service 1406 is not listed in registrar 1410, then smart proxy 1420 will periodically recheck registrar 1410's lookup for service 1406's new URL, provided the rechecking process does not timeout (step 1528). If the process times out prior to relocating the service, the self-healing process ends and client 1408 will be forced to roll back its operation to whatever state is necessary for finding and using a different service. Returning to step 1526, once service 1406 has been looked up in registrar 1410's lookup, smart proxy reissues the request to newly restarted service 1406 in its new VM container. Once service 1406 responds, the stale reference is healed and the process ends" at paragraph [0286].

As to applicant's argument that neither Robertson nor Pace disclose, "communicating said service information to said remote service from said proxy service when a determination of valid service information is made by said proxy service", the examiner disagrees in that Pace discloses, "In an alternate embodiment, a check is made to determine if an asset adapter will handle this fault and a proxy request or redirection is performed to access the source asset. A proxy object accepts the request, calls the CDS/ADS, which in turn calls the EDA on the source, which performs the call within the source environment, and returns the result to the CDS/ADS, which returns the result to the CDA, and the CDA returns the result to the proxy object, the proxy object returns the results to the caller" at paragraph [0908].

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnese Johnson whose telephone number is 571-270-1097. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. J./

Examiner, Art Unit 2166

December 8, 2008

JJ

/Khanh B. Pham/

Primary Examiner, Art Unit 2166